AMENDMENTS TO THE SPECIFICATION:

Amend the title on page 1, as follows:

~~REMOVABLE SEAL OF~~ ESSENTIALLY GAS-IMPERMEABLE THERMOPLASTIC ELASTOMER

Amend the paragraph beginning on page 2 at line 13 as follows:

The product of this invention provides a soft seal having a hardness in the range from Shore A 30 to 90, which is essentially gas-impermeable so long as the gas exerts a pressure of less than about 3 atm (or bar). Though the pressure does not affect permeability which is the permeation rate normalized for a 1 mil (2.54 μm) thickness and 1 atm, the permeation rate at 3 atm is so high that it requires an uneconomically thick seal to provide the desired barrier against oxygen permeation. The thermoplastic blend of this invention provides an extrudable, injection-moldable or blow-moldable shaped article of arbitrary shape, most commonly a laminar sheet, consisting essentially of a blend of synthetic rubber and ~~polybutene~~ polyisobutene plasticizer; when formed into a seal having specified hardness and/or specified melt viscosity, the seal may be removably secured to the mouth of a container to seal its contents against a damaging concentration of oxygen permeating through the seal.

Amend the paragraph beginning on page 3 at line 25 as follows:

The TPE is chosen from (i) a block copolymer of a vinylaromatic compound and a conjugated diene, which optionally, is at least partially hydrogenated, and (ii) a thermoplastic vulcanizate (referred to as a "TPV"). The block copolymer (i) may be a diblock, triblock, tetrablock or star block copolymer, but is typically a triblock of either styrene-butadiene-styrene, or styrene-isoprene-styrene. The TPE (i) is therefore of referred to herein, for convenience and brevity, as a "SBS" copolymer. Either (i) or (ii) may be too soft or too hard, before it is plasticized, to be used as a desirable elastomeric product, usable as a removable sealing element in hardness range from Shore 30 A to 90. In either case the starting TPE has an oxygen-permeability greater than 40,000 cc.(2.54 μm)/m^2.day.atm at 23 °C which is

unsatisfactory. When either (i) or (ii) is too hard, it may be melt-blended with an unreactive polymono(lower)olefin, the olefin having from 2 to 4 carbon atoms, preferably with more than 5% by weight of the TPE. A TPE with unsatisfactory oxygen-permeability is converted to one in which the oxygen-permeability is satisfactory for use as a sealing element when it is plasticized with "liquid ~~polybutene~~ polyisobutene", as disclosed herein.

Amend the paragraph beginning on page 5 at line 16 as follows:

~~Polybutene~~ Polyisobutene, whether homo- or copolymers of isobutene, 1-butene (α-butylene) and/or 2-butene (ß-butylene, whether cis- or trans-) irrespective of the ratio of the repeating units, and polymers of higher alkenes having from 5 to about 8 carbon atoms ("poly(higher)alkenes"), are typically rubbery solids. But such rubbers, by themselves have unsatisfactorily high oxygen-permeation rates. Since a thin seal of an adequately deformable block copolymer, formed of S-blocks and a M-block of a conjugated diene, or, of a mono(lower)olefin, and no harder than Shore A 90, provides an unsatisfactorily high oxygen-permeation rate, it is not surprising that a rubbery poly(higher)alkene would also provide a comparably unsatisfactory oxygen-permeation rate.

Amend the paragraph beginning on page 6 at line 5 as follows:

A liquid homopolymer of isobutene (isobutylene) is commercially available, and an isobutene-co-butene copolymer, in which butene is present in a minor molar proportion, may also be produced as a liquid. The homo- and copolymer are together referred to as "~~polybutene~~ polyisobutene" herein. Its manufacturer teaches applications of the liquid polymer in adhesives. The text of those teachings are set forth in full below:

Amend the paragraph beginning on page 6 at line 12 as follows:

The advantages offered by polybutenes when compared to mineral oils include low colour and excellent colour stability, good resistance to oxidation, practically no toxicity, and a wide range of viscosities. More significant however is the ability of [[th]] the highly tacky grades (e.g. Indopol H-300 and H-1900) to partially or totally replace relatively expensive

tackifier resins, thereby reducing formulation costs. Polybutenes are used to modify a variety of polymers and rubbers in adhesive formulations, exhibiting excellent compatibility with the non-polar types. Polybutenes can also be used in polar rubbers such as nitrile and polychloroprene, but the addition of natural rubber may be necessary to improve the compatibility.

Amend the paragraph beginning on page 7 at line 27 as follows:

In view of the fact that a sealing element for a closure means, such as a bottle cap, must be removable to use the contents of the bottle, improving the adhesion of the seal to the mouth of the bottle is contraindicated. But improving adhesion is what one would expect to do by adding ~~polybutene~~ polyisobutene to an elastomeric seal. There is nothing to suggest that one should add ~~polybutene~~ polyisobutene to improve adhesion with the specific intention of finding a way to negate the adhesive effect obtained by use of the ~~polybutene~~ polyisobutene plasticizer.

Amend the three consecutive paragraphs beginning on page 8 at line 3 as follows:

Any gas, inert with respect to ~~polybutene~~ polyisobutene, and an oxygen-containing gas in particular, may be bubbled through liquid ~~polybutene~~ polyisobutene because the gas is substantially insoluble in it, as long as the pressure of the gas is greater than the hydrostatic head exerted by the liquid. Therefore it is particularly unexpected that when the liquid polyisobutene is blended into an elastomer, the blended liquid forms an effective barrier to flow of the gas through the blend.

Since (S-block)-(M-block)-(S-block), polybutene rubbers and conventional TPVs in the hardness range Shore A 30 to 90 are inadequately effective gas barriers there was no reason to expect that a liquid ~~polybutene~~ polyisobutene in combination with either a SBS or a TPE might discharge that function far more effectively. The ~~polybutene~~ polyisobutene manufacturer's own teachings, categorizing ~~polybutene~~ polyisobutene as a plasticizer, fail to suggest that a SBS or, any TPV, thermoformed in a thickness which by itself is substantially gas-permeable to an oxygen-containing gas, when blended with the liquid ~~polybutene~~

polyisobutene, then thermoformed into the same thickness, should provide a modified SBS or TPV which is essentially gas-impermeable. By "essentially gas-impermeable" is meant that the polymer has an oxygen-permeability of less than 15,000 cc.(2.54 μm)/m^2.day.atm, as measured with a Mocon Instrument as described in greater detail below. A comparable measurement may be made by the procedure described in ASTM D 3985-81 but the value for an equivalent oxygen permeability has not been determined.

Still further, it is generally found that a blend of SBS and the ~~polybutene~~ polyisobutene plasticizer results in too low a melt viscosity, and so soft and deformable a composition that it does not provide a "basic blend" suitable for a satisfactory "basic seal". To provide desirable properties for a basic blend usable as a removable seal, it was necessary to "harden" a too-soft and therefore unusable composition without sacrificing its homogeneity. By "unusable" is meant that pressure exerted by a cap on the seal causes the cross-section of that portion of the seal in contact with the cap to decrease more than 20% because the TPE is too soft; or, that pressure exerted by the cap fails to provide a gas-tight seal at the mating surfaces of seal and container because the TPE is too hard. Therefore, when too soft, it is essential to use an adequate amount of a hardener or a melt index modifier which is compatible with the ~~polybutene-plasticized~~ polyisobutene-plasticized SBS, the amount being sufficient to provide a combination of desirable hardness, preferably in the range from about Shore A 50 to Shore A 85, and oxygen-permeability less than 20,000 cm^3.(2.54 μm)/m^2.day.atm at 23 °C. Most preferably the hardener contributes to enhancing oxygen-barrier properties rather than diminishing them, that is, increasing oxygen-permeability. Though a too-soft ~~polybutene-plasticized~~ polyisobutene-plasticized TPV may also be hardened the amount of hardener may be minimized or zero if a TPV starting material having the appropriate hardness is selected.

Amend the two consecutive paragraphs beginning on page 9 at line 12 as follows:

In addition, when a substantial amount of ~~polybutene~~ polyisobutene, more than 50 phr (parts per 100 parts of TPE), is used in combination with sufficient "hardener" to prepare a desired basic blend, it is typically undesirably tacky for general use. The basic blend is

therefore detackified with an appropriate detackifier adapted to bloom to the surface of the thermoformed "detackfied blend", to provide a "detackified seal".

Though one might expect that, like ~~polybutene~~ polyisobutene, polymers of other acyclic alkenes, whether branched or substantially straight-chained, having from 5 to 8 carbon atoms and a number average molecular weight ("Mn") in the range from about 200 to 6000, would decrease oxygen-permeability substantially when blended into a TPE, they do not.

Amend the paragraph beginning on page 10 at line 8 as follows:

It has been discovered that a ~~polybutene~~ polyisobutene oil plasticizer through which air under pressure sufficient only to overcome the hydrostatic head of liquid may be bubbled at ambient temperature of 23 °C, is miscible with either (i) a vinylaromatic-polyolefin polyblock copolymer, ("SBS"), optionally hydrogenated to provide a block of a mono(lower)olefin, having Mn in the range from about 40,000 to 1,100,000, or (ii) a TPV having a Shore A 30 - 100 hardness, tensile at 100% elongation in the range from about 0.5 to 10 MPa and specific gravity in the range from 0.9 to 0.99, to produce a blend having a hardness in the range from Shore A 30 to 90, preferably Shore A 40 to 80; though TPEs commonly used for sealing elements typically have oxygen-permeability greater than about 40,000 cc.(2.54 μm)/m^2.day.atm at 23 °C, the ~~polybutene-plasticized~~ polyisobutene-plasticized TPE is essentially gas-impermeable when blended with enough polybutene oil to provide the desired hardness but not enough to make the blend unusably "tacky". To make a desirable elastomeric product a starting TPE is melt-blended with from about 20 to 180 phr fluidizable polybutene (parts per 100 parts of TPE only) having sufficiently low Mn to be fluid during melt-blending of the TPE. When the TPE is SBS it may be melt-blended with or without a blowing agent; and preferably, it is melt-blended with more than 5% by weight of a polymono(lower)olefin.

Amend the three consecutive paragraphs beginning on page 11 at line 7 as follows:

When the TPE is a TPV, the 10% to 60% by weight of mineral oil conventionally

used to plasticize the TPV to make it processable, may be replaced with ~~polybutene~~ polyisobutene to provide unexpectedly lower oxygen-permeability. Only TPVs formed with non-polar rubbers, such as the vulcanizates of a crystalline α-olefin polymer and EPDM (ethylene/propylene/diene monomer rubber), are effectively plasticized by ~~polybutene~~ polyisobutene; TPVs formed with polar rubbers are not.

A "basic blend" of ~~polybutene-plasticized~~ polyisobutene-plasticized SBS, preferably a triblock in which the mid-block is isoprene/butadiene hydrogenated in heterogeneous relative order, or TPV, is uniquely adapted to be used as a deformable, thin, essentially gas-impermeable "basic seal" having a cross-section in the range from about 0.5 mm to 10 mm thick, and controllable tackiness. The seal may be used with or without a cooperating closure means removably disposed in sealing engagement with a container so long as the seal has a hardness in the range from about Shore A 30 to 90.

It is essential that the amount of ~~polybutene~~ polyisobutene plasticizer used be insufficient, relative to the amount of TPE, so as to render the plasticized TPE-blend unusable as a seal though the blend may be usable as an adhesive. When the amount of ~~polybutene~~ polyisobutene used is sufficient to cause the seal to adhere to the container so as to be removable with difficulty, or not removable without damaging the elastomer, it is found that the tackiness of the seal may be negated by adding an appropriate detackifier to the blend, as evidenced by the absence of an additional glass transition temperature (Tg) attributable to it. The addition of the detackifier also suppresses bleeding of the polybutene from the thermoformed blend during the shelf-life of the contents of the container. The degree of tackiness or "tack" tolerated in a product depends upon its usage; use of the ~~polybutene-plasticized~~ polyisobutene-plasticized blend as a stopper, e.g. a "cork" for a bottle, whether the cork is to be removed with a cork-screw or with one's fingers, will be expected to have different tack specifications compared to use of the blend as a cap liner or to seal a syringe vial.

Amend the two consecutive paragraphs beginning on page 13 at line 13 as follows:

SBS and TPV sealing elements are currently used in food packaging and medicinal

products because they are sufficiently soft and flexible so as to form effective seals. Though such seals may effectively preclude leakage of gas from around the periphery of the seal, the TPE itself is insufficiently gas-impermeable when thermoformed in an arbitrarily thin seal, typically having a thickness in the range from about 0.1 mm to about 10 mm. A thin TPE of appropriate hardness, whether (i) an SBS or (ii) a TPV, when plasticized with enough ~~polybutene~~ polyisobutene to provide substantially decreased oxygen-permeability provides a reliable and rugged, essentially fluid-impermeable seal for a conventional container, or an inner liner for a conventional package or drum, without sacrificing softness and flexibility.

When the ~~polybutene~~ polyisobutene plasticizer is present at a low level, from about 10 to 50 parts by weight of plasticizer per 100 parts of SBS, the "basic seal" need not be detackified to be removable, because of the presence of the polyolefin hardener; the non-detackified basic blend nevertheless has an oxygen-permeability less than 20,000 cc.(2.54 μm)/m^2.day.atm at 23°C. An oxygen-permeability of 35,000 cc.(2.54 μm)/-m^2.day.atm at 23°C is deemed marginally acceptable for better shelf life than currently available with seals for food products such as fresh orange juice. The non-detackified basic seal may be used in combination with a closure means to seal a container's mouth; the basic seal, by itself, may be used as a thin flexible cap, from about 0.5 mm to about 2 mm thick, forcibly fitted over the mouth of a glass container. The seal may be a stopper for a serum bottle or a metal-enclosed septum for an injectable drug. The septum is formed in a thickness which is easily penetrated by a hypodermic needle.

To tailor the melt index and hardness of either a "basic blend" or a "detackified blend" it is preferred to add a polymono(C_2 -C_4) olefin hardener having a melt index in the range from 0.5 to 50 gm/10 min (ASTM D1238), in combination with from 0 to 20 phr of a poly-mono(C_2 -C_4) olefin rubber having Mn in the range from 200,000 to 1,000,000, the amount of hardener used being readily compatible in the block copolymer/plasticizer blend and sufficient to provide the desired melt index and releasability. Addition of from 1 to 20 phr detackifier improves releasability without substantially affecting hardness or solution viscosity.

Amend the three consecutive paragraphs beginning on page 14 at line 16 as follows:

The "basic seal" using either a SBS or a TPV, most preferably contains a high level of ~~polybutene~~ polyisobutene, from above 30 to about 100 phr (parts by weight per 100 parts of TPE); the resulting blend is required to be detackified with an appropriate detackifier, preferably from 1 to 20 phr. The resulting detackified resin composition may be thermoformed into a "detackified seal" for general use as a seal in a removable closure means, or into a collapsible liner for a container, for example, a bag for a fiber drum.

To prepare a preferred blend of this invention it is essential to start with a TPE having a hardness no lower than that of the desired ~~polybutene-plasticized~~ polyisobutene-plasticized TPE, preferably in the range from Shore A 50 to 85, and to blend in the amount of polybutene and hardener, found by trial and error, to yield a blend with the desired properties and gas-impermeability.

In one embodiment, the SBS blend consists essentially of a styrene-mono(lower)olefin -styrene, or, styrene-isoprene-styrene, or, styrene-butadiene-styrene block copolymer having a hardness in the range from at least Shore A 30 up to 90; liquid ~~polybutene~~ polyisobutene oil having Mn in the range from about 200 to 6000; and, from 20 to 100 phr (parts by weight ~~of polyolefin hardener~~ per 100 parts of block copolymer) of polyolefin hardener ; such a blend is thermoformable to provide a removable seal with a 0.5 mm to 10 mm thick cross-section, usable in combination with or without a closure means for sealing a container. From 0 to 100% of the vinyl unsaturation in the block copolymer may be hydrogenated, and preferably the triblock copolymer is partially, that is, 50% to 85%, or fully hydrogenated to provide better stability, weatherability and ozone resistance.

Amend the two consecutive paragraphs beginning on page 15 at line 8 as follows:

Most preferably, the SBS is a styrene-ethylene-butylene-styrene ("SEBS") copolymer, or a styrene-ethylene-butylene copolymer, and has Mn in the range from about 80,000 to about 500,000; and the SBS is blended with a liquid polybutene having a major molar proportion of isobutene repeating units relative to the butene repeating units, preferably all isobutene units, the ~~polybutene~~ polyisobutene oil having Mn in the range from about 1000 to

4000; the ~~polybutene~~ polyisobutene is preferably present in the range from about 20 to 100 phr (parts per 100 parts by weight of SBS) and the elastomeric product is light-permeable so as to be able to read a legend inscribed under the product.

In another embodiment, the TPV blend consists essentially of a vulcanizate of isobutyl or EPR or EPDM rubber and a poly(lower)monoolefin, in which at least 10 phr, preferably 20 phr, and most preferably all of a mineral oil conventionally used to render the TPV processable, is substituted with ~~polybutene~~ polyisobutene oil. A preferred commercially available TPV is a partially or fully crosslinked dynamic vulcanizate of 60-85 phr ethylene-propylene-diene rubber and correspondingly, 40-15 phr polypropylene which TPV is not hydrogenated. Such a starting TPV is chosen with a hardness in the range from Shore A 30 to 100 so that upon melt-blending with ~~polybutene~~ polyisobutene and, optionally additional polyethylene or polypropylene, the product has the desired hardness and oxygen-permeability. The amount of ~~polybutene~~ polyisobutene used is sufficient to provide a blended-TPV hardness in the preferred range from Shore A 50 up to 85; preferably the liquid ~~polybutene~~ polyisobutene oil has Mn in the range from about 2000 to 6000. Most preferably, the TPV has a tensile at 100% elongation in the range from about 1 to 5 MPa, and is blended with a liquid ~~polybutene~~ polyisobutene having the aforementioned limitations.

Amend the paragraph beginning on page 16 at line 1 as follows:

To provide desired melt index and to "harden", that is, overcome undesirable softness, the blend of triblock copolymer and polybutene typically exhibits two distinct Tgs unless the molecular weights of the mid-block and end-block are so close that there is an overlapping of the Tgs. An unusable, too-soft blend with a too-low melt index may be blended with a normally solid thermoplastic poly(mono)olefin having a melt index greater than 0.2 gm/10 min (ASTM D1238), in an amount from 5 to 25 parts by weight per 100 parts of the combined weight of triblock copolymer, ~~polybutene~~ polyisobutene and polymonoolefin so that the hardened blend typically exhibits three Tgs. A preferred poly(mono)olefin is a homo- or copolymer of an α-ß monoolefin having from 2 to 8 carbon atoms; polypropylene having a melt index in the range from about 5 to 35 gm/10 min is most preferred.

Amend the paragraph beginning on page 16 at line 24 as follows:

Since ~~polybutenes~~ polyisobutenes having Mn lower than 500 are found to be relatively ineffective to decrease oxygen permeability significantly, ~~polybutenes~~ polyisobutenes having Mn greater than 500 but lower than that at which the ~~polybutene~~ polyisobutene is a solid at 100°C though in a fluid state during melt-blending, are preferred. Commercially available Indopol H-1500, Panalene H-300E and Indopol L-100 ~~polybutenes~~ polyisobutenes are essentially homopolymers of isobutene having Mn in the range from about 1000 to 5000 which are most preferred, though copolymers which have a small enough butene content, less than 40% of the copolymer, typically from about 1 to 20% may also be used if fluidizable during melt-blending.

Amend the paragraph beginning on page 18 at line 17 as follows:

The ~~polybutene-plasticized~~ polyisobutene-plasticized TPV is prepared in a conventional manner except that the mineral oil usually used is substituted with polybutene oil.

Amend the paragraph beginning on page 19 at line 7 as follows:

Referring to Figs 1 and 2 there is illustrated a conventional cap 10 for a bottle 11 having a mouth defined by a cylindrical wall 12 which is threaded on its outer surface. The cap is made of metal and includes a base wall 15 and a peripheral wall 16 having a rolled flange with a rolled end 27 at its free end. A gasket 17 of the ~~polybutene-plasticized~~ polyisobutene-plasticized blend is cast in situ and extends along the inner surface of the wall 16 which is threaded tightly fitted to the mouth of the bottle. The annular portion 18 of the gasket provides an effective seal against leakage, and a comparable seal may be provided if the thickness of the gasket at 20 is such that the surface 20 bears against the outer surface 25 of the bottle. Any oxygen permeating through the gasket is required to traverse the vertical distance between the point of contact at 13 and the periphery of the mouth of the bottle. The vertical section 22 may be foreshortened so that the inner surface 23 of the upper portion of

the gasket lies against the horizontal upper surface 24 of the mouth.

Amend the two consecutive paragraphs beginning on page 19 at line 24 as follows:

Referring to Fig 3 there is illustrated a generally cylindrical plug, indicated generally by reference numeral 30, molded to tightly fit in the mouth of a bottle (not shown) so that one end-face 31 of the plug may be exposed to the atmosphere while the opposed end-face (not shown) will contact the contents of the bottle. The cork may be mottled to give the appearance of natural cork, by mixing differently pigmented ~~polybutene-plasticized~~ polyisobutene-plasticized blends.

Illustrated in Fig 4 is another conventional embodiment of a "cork" 35 molded from ~~polybutene-plasticized~~ polyisobutene-plasticized TPE to have a generally cylindrical or slightly tapered plug portion 36 and a generally hemispherical cap portion 37 at one end of the plug portion. The off-set 38 of the base of the cap portion on either side of the plug portion 36 is adapted to overlie the horizontal surface of the rim (not shown) of the bottle to be stoppered. The face 39 of the plug portion may be of larger diameter than the distal portion of the plug so as to provide a taper, if desired.

Amend the two consecutive paragraphs beginning on page 20 at line 7 as follows:

Referring to Figs 5 and 6 there is illustrated a conventional syringe vial having a neck 50 to which a metal closure 60 is tightly secured. The metal closure is a ring 46 having pendant serrations 47 in uniformly spaced-apart relationship with each other around the entire periphery of the ring. Diametrically opposite portions of the ring are connected with a metal strip 48 in which is provided a disc 52 having an aperture 53 in it. A generally cylindrical septum 40 about 1 mm thick, formed of ~~polybutene-plasticized~~ polyisobutene-plasticized TPE, is tightly held near its periphery, between the ring 46 and the surface of the rim of the vial, when the ring is deformed around the mouth of the vial and the serrations pressed tightly inwardly against the neck 50. A needle of a hypodermic syringe may be readily inserted through the aperture 53 and the septum 40 to withdraw contents of the vial. A twisting motion in the horizontal plane, as illustrated by the arrow 45 on the ring can loosen the ring

sufficiently to remove the metal closure 60 in the vertical direction.

The thermoplastic elastomer:

It is essential that the deformable ~~polybutene-plasticized~~ polyisobutene-plasticized TPE be "soft" as stated above, and stable to degradation under storage conditions for at least one year.

Amend the two consecutive paragraphs beginning on page 21 at line 25 as follows:

Rubbers useful in the blends include butyl rubber, halobutyl rubber, EPDM and EPR (ethylene/propylene rubber) rubber, acrylonitrile/butadiene rubber (NBR) and natural rubber. Combinations of two or more rubbers of different types can also be used. TPVs described in the following U.S. patents, the disclosures of which are herein incorporated by reference: U.S. Pat. Nos. 4,104,210; 4,130,534; 4,130,535; 4,299,931; and 4,311,628; *inter alia*, can be effectively plasticized with ~~polybutene~~ polyisobutene. Particularly useful are blends of crystalline polyolefin plastics and partially cured rubbers, such as those described in U.S. Pat. Nos. 3,806,558 and 3,862,056, and blends of crystalline polyolefins and uncured EPR or EPDM rubber. Typically, the softer, flexible grades of TPVs are preferred, which have high ratios of rubber to polyolefin, such as from 65:35 up to 85:15. The TPVs, like SBSs may optionally contain other ingredients, including oils, waxes, fillers, colorants, antidegradants and the like.

In the following Table 1, equal parts of S-B-S triblock copolymer (Septon 8004) and polyisobutene (Panalene H-300) oil are used in a basic blend which is compared to a blend with the same ingredients except that the ~~polybutene~~ polyisobutene oil is replaced with the same amount of ~~polybutene~~ mineral oil.

Amend the two consecutive paragraphs beginning on page 22 at line 27 as follows:

It is evident that the contribution of the ~~polybutene~~ polyisobutene oil results in the oxygen permeability being decreased by more than a factor of 2 over the prior art blend containing a mineral oil of comparable Mn. Seals made with mineral oil plasticized block copolymer are deemed satisfactory only for short term storage.

The following examples in Table 2 indicate that increasing the proportion of ~~polybutene~~ polyisobutene oil improves the barrier properties of the basic blend, but when a relatively high amount of ~~polybutene~~ polyisobutene is used, the blend is too tacky for general use and is therefore detackified.

Amend the Table 2 on page 23, starting at line 4 as follows:

Table 2

Ingredient	Basic	Detackified Blends			
Septon 8004 SEBS☼ triblock	100	100	100	100	100
Panalene H-300* polybutene oil	130	130	140.	160	170
F040 PP (melt flow 4)	54.	54.	54.	54.	54.
Dow Corning 200▲ silicone oil	--	2.33	2.33	2.33	2.33
Irganox 1010 antioxidant	0.15	0.15	0.15	0.15	0.15
DLTDP antioxidant	0.30	0.30	0.33	0.33	0.33
Kemamide U wax	2.17	2.17	2.17	2.17	2.17
Hardness, Shore A	72.	70.	68.	61.	57.
Oxygen permeation (cc.mil/m^2.day.atm)	~~1580.~~ 15800.	~~1580.~~ 15800.	~~1380.~~ 13800.	~~1250.~~ 12500.	~~1110.~~ 11100.

Amend the paragraph beginning on page 23 at line 18 as follows:

The following examples in Table 3 indicate the effect of ~~polybutene~~ polyisobutene substituted for a mineral oil of equivalent Mn in a TPV; and compares the effect of increasing the ~~polybutene~~ polyisobutene used.

Amend the paragraph beginning on page 24 at line 3 as follows:

It is evident that substitution of mineral oil by ~~polybutene~~ polyisobutene decreases the oxygen-permeability by 52%, more than half; replacing only 25% of the mineral oil with ~~polybutene~~ polyisobutene decreases the oxygen-permeability by 35%.